

PALEONTOLOGY.—A rare Tertiary glycymerid from South Carolina and Florida.

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F. S. MacNeil, of the U. S. Geological Survey, several months ago showed me some specimens of an unusual glycymerid which had been collected from a water well near Miami, Fla. Recently I examined the specimens more closely and decided that they are not *Glycymeris quinquerugata*, as they had been labeled, but are *Pectunculus transversus* Tuomey and Holmes from Smith's Goose Creek, S. C. Although the description given by Tuomey and Holmes is brief, the salient characters mentioned by them (the great length and the wrinkled posterior side) are significant enough to identify the specimens in the Museum as the same species. Unfortunately, *Pectunculus transversus* Tuomey and Holmes, 1856, is a homonym of *Pectunculus transversus* Lamarck, 1819, and Tuomey and Holmes's species is herein renamed.

Glycymeris aberrans Nicol, n. name

Figs. 1-5

Pectunculus transversus Tuomey and Holmes. Pleiocene fossils of South-Carolina: 51, pl. 17, fig. 6c. 1856; not *Pectunculus transversus* Lamarck, Animaux sans vertèbres 6 (pt. 1): 55. 1819.

Description.—The following is the original description by Tuomey and Holmes:

Shell ovate transverse, equilateral; anal side on the interior wrinkled; pallial margin finely crenulated.

This specimen, although a cast, is so very characteristic that it cannot be confounded with any other species. The length is nearly twice the breadth, and the teeth are closer on the anal than on the buccal ridge of the hinge.

With the additional material at hand, the following can be added to the original description: Beaks orthogyrate, located at the middle of the dorsal border; ligament small and low, made up of three or four chevrons, amphidetic; dorsal border long and straight, ventral margin broadly arched; teeth located on a broad arch, 20 to 25 in number, the larger ones grooved in the middle; crenulations on interior margin numerous, narrow, closely spaced, eight per cm on the mid-ventral border of a specimen 27 mm in height; central part of shell has broad, slightly raised radial ribs, which disappear at both ends of the shell; no radial striae appear on the broad ribs,

but the absence of striae may be due to poor preservation; radial threads present on the umbo and occasionally on the ends of the shell.

Most striking feature is rugae on outside of shell; rugae large and numerous, commonly reflected on interior margin of shell as small undulations, particularly on posterior and dorsal margins but in some specimens on anterior margin too; rugae best developed on umbo and at both ends of shell, middle of larger shells relatively free of them; rugae not parallel to growth lines and commonly split up by them.

Measurements in mm—

U. S. N. M. no.	Height	Length	Convexity
Hypotype 561486	26.8	33.6	19.3
Hypotype 561484	16.9	20.9	13.7

Comparisons.—The closest related species to *Glycymeris aberrans* is the rugate form of *G. americana* (Defrance). *G. aberrans* differs from it by being more elongate, by having well-developed rugae on both ends of the shell, and by not having well-developed striae on the broad radial ribs.

Localities.—This species was reported from Smith's Goose Creek, S. C., by Tuomey and Holmes. The locality is described in greater detail by Cooke (1936, p. 129) as follows:

U. S. Geological Survey Loc. no. 10412. Bluff on southeast side of Goose Creek a third of a mile southeast of Seaboard Air Line Railway and three-fourths of a mile southeast of Melgrove (Berkeley County, South Carolina).

The specimens in the U. S. National Museum are from U. S. Geological Survey loc. no. 15112. From well G.—188, Krome Avenue and Tamiami Trail, 19 miles west of Miami, Dade County, Fla. (67.8 to 144.9 feet below the surface).

Geologic age.—Tuomey and Holmes called the Smith's Goose Creek locality Pliocene. Cooke (1936, p. 130) tentatively assigns the beds at Smith's Goose Creek to the Pliocene but says that they may be upper Miocene. Miss Julia Gardner identified the well material at the depths where *Glycymeris aberrans* was found as upper Miocene. The closest relative to *G. aberrans*, the rugate form of *G. americana*, is confined to upper Miocene strata.

Types and other specimens.—Hypotype U. S. N. M. no. 561484 and hypotype U. S. N. M. no.

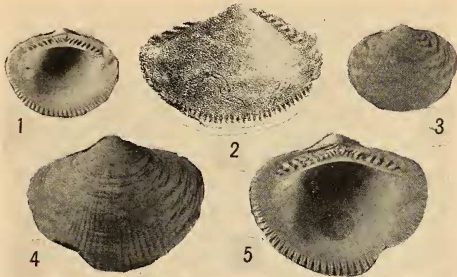
561486 and 13 other specimens in U. S. N. M. Collection with nos. 561483, 561485, 561487, 561488, 561489.

REFERENCES

COOKE, C. WYTHE. *Geology of the Coastal Plain*

of South Carolina. U. S. Geol. Surv. Bull. 867: 196 pp. 1936.

TUOMEY, M., and HOLMES, F. S. *Pleiocene fossils of South-Carolina: containing descriptions and figures of the Polyptaria, Echinodermata and Mollusca*: 152 pp., 30 pls. Charleston, S. C., 1855-1857.



FIGS. 1-5.—*Glycymeris aberrans*: 1, Interior view and 3, exterior view, right valve, hypotype U. S. N. M. no. 561484; 2, internal cast, copied from Tuomey and Holmes, 1856, pl. 17, fig. 6c; 4, exterior view and 5, interior view, right valve, hypotype U. S. N. M. no. 561486. All figures natural size. Hypotypes from U. S. G. S. loc. no. 15112, 19 miles west of Miami, Dade County, Fla. Tuomey and Holmes's specimen from U. S. G. S. loc. no. 10412, Smith's Goose Creek, Berkeley County, S. C.

ENTOMOLOGY.—*Notes on synonymy in Siphonaptera*. G. H. E. HOPKINS, British Museum (Natural History). (Communicated by C. F. W. Muesebeck.)

In the course of preparing a catalogue of the N. C. Rothschild collection of fleas a few instances have come to light in which names currently accepted as referring to the same taxonomic unit actually apply to different units, and many more in which names believed to refer to separate units are synonyms. The volume dealing with the Pulicoidea is now in the press, and it is hoped that it will be published this year, but it seems desirable to put on record some of the other hitherto-unpublished instances in which the accepted placing of a taxonomic unit appears to be incorrect. Unless stated otherwise, all instances in which changes in the placing of species and subspecies are suggested are based on examination of specimens, commonly types or paratypes. With regard to genera, which are subjective units and not objective, there are two courses which can be adopted if two apparently natural groups of species differ by characters apparently of little phylogenetic significance, and the choice between

them seems to be mainly a matter of convenience. Obviously a difference in phylogenetically important characters must be recognized by generic separation, but where this is not the case it seems to me to be better to emphasize the resemblances between the two groups than their differences unless considerations of convenience force one to snatch at any chance of breaking up an unwieldy group. Where, therefore, a small group has been broken up into subgenera on phylogenetically unimportant characters I can see little advantage in retaining this arrangement, whereas if the same thing has happened in a large group convenience dictates accepting it. This is, for instance, the case in the *Rhadinopsyllinae*, where I have grave doubts whether *Rhadinopsylla* and *Rectofrontia* are really generically separable or even whether they are entirely natural groups, but have kept them separate because the group would otherwise be so inconveniently large.

Apart from instances of synonymy at-